# DALI PS24 100mA

Datasheet
DALI Bus Power Supply Unit

DALI-line power supply

Art. Nr. 24033444-24VDO



# DALI PS24 100mA Bus Power Supply

#### Overview

- DALI bus power supply unit.
- guaranteed supply current 100mA.
- maximum supply current 130mA.
- suitable to power a DALI-line with up to 50 standard DALI ballasts.
- suitable for back box installation and integration in protection class II devices.
- power supply range 24Vdc ... 48Vdc.



#### Specification, Characteristics

type	DALI PS24 100mA	
article number	24033444-24VDO	
input: +, -		
input type	supply, dc voltage	
marking input terminals	+, -	
input voltage range	24Vdc 48Vdc	
max. input supply current	100mA	
power consumption max.	4W	
startup time	250ms	

#### output: DA+, DA-

output type	DALI Supply
marking output terminals	DA+, DA-
output voltage range	12Vdc 20,5Vdc
DALI supply current	100mA
guaranteed DALI supply current	100mA
max. DALI supply current	130mA
open circuit proof	yes
short circuit proof	yes

#### insulation data

insulation DALI / mains	reinforced isolation

#### environmental conditions

storing and transportation temperature	-20°C +75°C
operational ambient temperature	-20°C +55°C
rel. humidity, none condensing	15% 90%

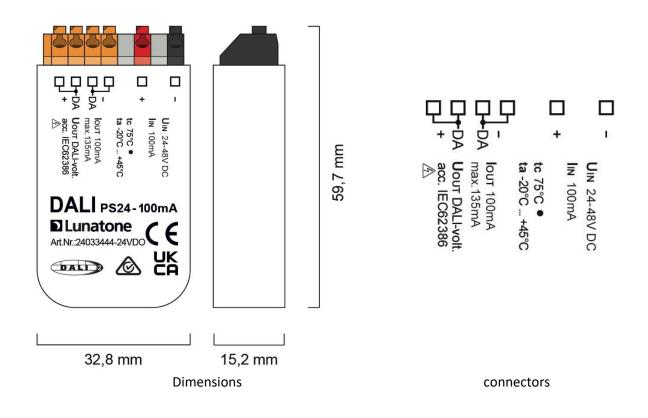
general data		
dimensions (l x w x h)	59mm x 33mm x 15mm	
mounting	back box installation	
nounting	integration in protection class II device	
ated maximum temperature tc	75°C	
xpected life time @tc	50.000 h	
otection class	II in intended use	
otection degree housing	IP40	
otection degree terminals	IP20	

#### terminals

connection type	spring terminal connector
wire size solid core	0,5 1,5 mm² (AWG20 AWG16)
wire size fine wired	0,5 1,5 mm² (AWG20 AWG16)
wire size using wire end ferrule	0,25 1 mm <sup>2</sup>
stripping length	8,5 9,5 mm / 0,33 0,37 inch

#### standards

DALI	EN 62386-101:2014
EMC	EN 61547
	EN50015 / IEC CISPR15
safety	EN 61347-2-11
	EN 61347-1
markings	DALI-2, CE



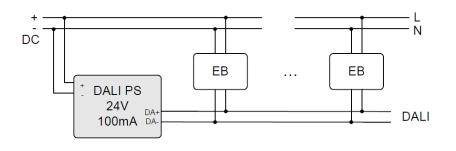
#### Installation

- The DALI PS24 100mA is intended for back box installation or in an enclosure.
- Ensure proper working cable relief for installation in protection class II equipment.
- connect dc supply voltage to terminals + and - with respect to polarity.
- the polarity of the output voltage is marked on the housing (DA+, DA-).
- The wiring should be carried out as a permanent installation in a dry and clean environment.
- Installation may only be carried out in a voltage-free state of the system and by qualified specialists.
- National regulations for setting up electrical systems must be followed.
- The DALI line may be routed together with the mains voltage (in one cable or as single wires in a tube).
- The DALI-line must not be connected to the mains or extra low voltage systems.

- The DALI wiring can be realised with standard low-voltage installation material. No special cables are required.
- Wiring topology of the DALI-line: Line, Tree, Star.
- Attention: The DALI-signal is not classified as SELV circuit (Safety Extra Low Voltage). Therefore, the installation regulations for low voltage apply.
- The voltage drop on the DALI line must not exceed 2V at maximum length (300m) and maximum bus load (250mA).
  - Do not use standard DC power supplies on the DALI-line, since they do not meet the requirements for DALI communication.



Attention: an improper DALI power supply can cause damage on DALI devices!



wiring diagram

#### Commissioning

- After installation, the DAL-2I power supply is ready for use
- Make sure that current consumption of all bus devices does not exceeds the guaranteed supply current of the DALI-2 PS24.

#### **Purchase Order Information**

**Art.Nr. 24033444-24VDO**: DALI PS24 100mA, guaranteed DALI supply current 100mA, back box installation

# Additional Information and Equipment

DALI-Cockpit – free configuration tool from Lunatone for DALI systems <u>https://www.lunatone.com/en/product/dalicockpit/</u>

Lunatone DALI products https://www.lunatone.com/en/

Lunatone datasheets and manuals https://www.lunatone.com/en/downloads-az/

#### Contact

Technical Support: <a href="mailto:support@lunatone.com">support@lunatone.com</a>

Requests: sales@lunatone.com



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#### Disclaimer

Subject to change. Information provided without guarantee. The datasheet refers to the current delivery.

The function in installations with other devices must be tested for compatibility in advance.